CLAIMS

    1.   A method for implementing two-way communication between at least first and second devices, comprising steps of:

    (a1) during finite time periods following transmission of respective first messages from the first device to the second device, using the first device to listen for second messages transmitted from the second device to first device; and

    (a2) after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, ceasing to use the first device to listen for second messages transmitted from the second device to the first device until after the first device transmits another first message to the second device.

    2.   The method of claim 1, wherein the first and second devices communicate via a wireless communication link, and wherein:

    the step (a1) comprises a step of, during the finite time periods following the transmission of the respective first messages from the first device to the second device, powering on a receiver of the wireless communication link which is included in the first device; and

    the step (a2) comprises a step of, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering off the receiver included in the first device.

    3.   The method of claim 1, wherein the first and second devices communicate via a wireless communication link, and wherein:

    the step (a1) comprises a step of, during the finite time periods following the transmission of the respective first messages from the first device to the second device, powering on a receiver of the wireless communication link which is included in the first device; and

    the step (a2) comprises a step of, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering off the receiver included in the first device until after the first device transmits another first message to the second device.

4.   The method of claim 1, further comprising steps of:

(b) receiving a sensor input with the first device; and

(c) in response to the sensor input, with the first device, generating processed data for inclusion in at least one of the first messages that are transmitted to the second device.

5.   The method of claim 4, wherein:

the step (b) comprises a step of receiving the sensor input from an accelerometer supported by a person in locomotion on foot; and

the step (c) comprises a step of generating as the processed data at least one of at least one foot contact time, a distance traveled, a pace, and a speed of the person.

6.   The method of claim 5, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

7.   The method of claim 5, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

8.   The method of claim 4, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

9.   The method of claim 4, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

10.   The method of claim 1, further comprising steps of:

(b1) during finite time periods following transmission of respective third messages from a third device to the second device, using the third device to listen for second messages transmitted from the second device to the third device; and

(b2) after each of the finite time periods following the transmission of the respective third messages from the third device to the second device, ceasing to use the third device to listen for second messages transmitted from the second device to the third device until after the first device transmits another first message to the second device.

11.   The method of claim 10, wherein the second device communicates with each of the first and third devices via at least one wireless communication link, and wherein:

the step (a1) comprises a step of, during the finite time periods following the transmission of the respective first messages from the first device to the second device, powering on a receiver of the wireless communication link which is included in the first device;

the step (a2) comprises a step of, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering off the receiver included in the first device;

the step (b1) comprises a step of, during the finite time periods following the transmission of the respective third messages from the third device to the second device, powering on a receiver of the wireless communication link which is included in the third device; and

the step (b2) comprises a step of, after each of the finite time periods following the transmission of the respective third messages from the third device to the second device, powering off the receiver included in the third device.

12.   The method of claim 10, wherein the second device communicates with each of the first and third devices via at least one wireless communication link, and wherein:

the step (a1) comprises a step of, during the finite time periods following the transmission of the respective first messages from the first device to the second device,

powering on a receiver of the wireless communication link which is included in the first device;

the step (a2) comprises a step of, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering off the receiver included in the first device until after the first device transmits another first message to the second device;

the step (b1) comprises a step of, during the finite time periods following the transmission of the respective third messages from the third device to the second device, powering on a receiver of the wireless communication link which is included in the third device; and

the step (b2) comprises a step of, after each of the finite time periods following the transmission of the respective third messages from the third device to the second device, powering off the receiver included in the third device until after the third device transmits another third message to the second device.

13.   A method for implementing two-way communication between at least first and second devices, comprising steps of:

(a1) during finite time periods following reception by the second device of respective first messages from the first device, using the second device to transmit second messages to the first device; and

(a2) after each of the finite time periods following reception by the second device of respective first messages from the first device, ceasing to use the second device to transmit second messages to the first device until after the second device receives another first message from the first device.

14.   The method of claim 13, wherein the first and second devices communicate via a wireless communication link, and wherein:

the step (a1) comprises a step of, during finite time periods following reception by the second device of respective first messages from the first device, when the second device needs to communicate with the first device, powering on a transmitter of the wireless communication link, which is included in the second device, to enable the second device to transmit the second messages to the first device; and

the step (a2) comprises a step of, after transmission of each of the second messages from the second device to the first device, powering off the transmitter included in the second device.

15.   The method of claim 13, wherein the first and second devices communicate via a wireless communication link, and wherein:

the step (a1) comprises a step of, during finite time periods following reception by the second device of respective first messages from the first device, when the second device needs to communicate with the first device, powering on a transmitter of the wireless communication link, which is included in the second device, to enable the second device to transmit the second messages to the first device; and

the step (a2) comprises a step of, after transmission of each of the second messages from the second device to the first device, powering off the transmitter included in the second device until after the second device receives another first message from the first device.

16.   The method of claim 13, further comprising steps of:

(b) receiving a sensor input with the first device; and

(c) in response to the sensor input, with the first device, generating processed data for inclusion in at least one of the first messages that are transmitted to the second device.

17.   The method of claim 16, wherein:

the step (b) comprises a step of receiving the sensor input from an accelerometer supported by a person in locomotion on foot; and

the step (c) comprises a step of generating as the processed data at least one of at least one foot contact time, a distance traveled, a pace, and a speed of the person.

18.   The method of claim 17, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

19.   The method of claim 17, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

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20.   The method of claim 16, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

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21.   The method of claim 16, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

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22.   The method of claim 13, further comprising steps of:

(b1) during finite time periods following reception by the second device of respective third messages from a third device, using the second device to transmit second messages to the third device; and

(b2) after each of the finite time periods following reception by the second device of respective third messages from the third device, ceasing to use the second device to

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transmit second messages to the third device until after the second device receives another third message from the third device.

23.   The method of claim 22, wherein the second device communicates with

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each of the first and third devices via at least one wireless communication link, and wherein:

the step (a1) comprises a step of, during finite time periods following reception by the second device of respective first messages from the first device, when the second device needs to communicate with the first device, powering on a transmitter of the at

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least one wireless communication link, which is included in the second device, to enable the second device to transmit the second messages to the first device;

the step (a2) comprises a step of, after transmission of each of the second messages from the second device to the first device, powering off the transmitter included in the second device;

the step (b1) comprises a step of, during finite time periods following reception by the second device of respective third messages from the third device, when the second device needs to communicate with the third device, powering on a transmitter of the at least one wireless communication link, which is included in the second device, to enable the second device to transmit the second messages to the third device; and

the step (b2) comprises a step of, after transmission of each of the second messages from the second device to the third device, powering off the transmitter included in the second device.

24. A first device capable of engaging in two-way communication with at least a second device, comprising:

a transmitter;

a receiver; and

at least one controller coupled to the transmitter and the receiver, the at least one controller being configured to power on the receiver to listen for second messages from the second device during finite time periods following use of the transmitter to transmit respective first messages to the second device, and being further configured to power down the receiver after each of the finite time periods following use of the transmitter to transmit respective first messages to the second device.

25. The first device of claim 24, wherein the controller is further configured to, after each of the finite time periods following use of the transmitter to transmit respective first messages to the second device, power down the receiver until after the transmitter is used to transmit another first message to the second device.

26. The device of claim 24, wherein the at least one controller is further configured to selectively use the transmitter to transmit first messages to the second device.

27.   The device of claim 24, wherein the transmitter and receiver are both included in a transceiver.

28.   A second device capable of engaging in two-way communication with at least a first device, comprising:

a transmitter;

a receiver; and

at least one controller coupled to the transmitter and the receiver, the at least one controller being configured to power on the transmitter to transmit second messages to the first device during finite time periods following reception by the receiver of respective first messages from the first device, and being further configured to power down the transmitter after transmission of each of the second messages from the second device to the first device.

29.   The first device of claim 28, wherein the controller is further configured to, after transmission of each of the second messages from the second device to the first device, power down the transmitter until after the receiver receives another first message from first device.

30.   The device of claim 29, wherein the transmitter and receiver are both included in a transceiver.

31.   A first device capable of engaging in two-way communication with at least a second device, comprising:

means for using the first device to listen for second messages transmitted from the second device to first device during finite time periods following transmission of respective first messages from the first device to the second device; and

means for, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, ceasing to use first device to listen for second messages transmitted from the second device to the first device until after the first device transmits another first message to the second device.

32. A second device capable of engaging in two-way communication with at least a first device, comprising:

means for using the second device to transmit second messages to the first device during finite time periods following reception by the second device of respective first messages from the first device; and

means for, after each of the finite time periods following reception by the second device of respective first messages from the first device, ceasing to use the second device to transmit second messages to the first device until after the second device receives another first message from the first device.

33. A method for implementing two-way communication between at least first and second devices, comprising steps of:

(a1) during finite time periods following transmission of respective first messages from the first device to the second device, powering on a receiver included the first device to listen for second messages transmitted from the second device to first device; and

(a2) after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering off the receiver included in the first device.

34. The method of claim 33, wherein the step (a2) comprises a step of, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering off the receiver included in the first device until after the first device transmits another first message to the second device.

35. The method of claim 33, further comprising steps of:

(b) receiving a sensor input with the first device; and

(c) in response to the sensor input, with the first device, generating processed data for inclusion in at least one of the first messages that are transmitted to the second device.

36. The method of claim 35, wherein:

the step (b) comprises a step of receiving the sensor input from an accelerometer supported by a person in locomotion on foot; and

the step (c) comprises a step of generating as the processed data at least one of at least one foot contact time, a distance traveled, a pace, and a speed of the person.

37.   The method of claim 36, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

38.   The method of claim 36, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

39.   The method of claim 35, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

40.   The method of claim 35, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

41.   A method for implementing two-way communication between at least first and second devices, comprising steps of:

(a1) during finite time periods following reception by the second device of respective first messages from the first device, when the second device needs to communicate with the first device, powering on a transmitter included in the second device to transmit second messages to the first device; and

(a2) after transmission of each of the second messages from the second device to the first device, powering off the transmitter included in the second device.

42. The method of claim 41, wherein the step (a2) comprises a step of, after transmission of each of the second messages from the second device to the first device, powering off the transmitter included in the second device until after the second device receives another first message from the first device.

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43. The method of claim 41, further comprising steps of:

(b) receiving a sensor input with the first device; and

(c) in response to the sensor input, with the first device, generating processed data for inclusion in at least one of the first messages that are transmitted to the second

10 device.

44. The method of claim 43, wherein:

the step (b) comprises a step of receiving the sensor input from an accelerometer supported by a person in locomotion on foot; and

15 the step (c) comprises a step of generating as the processed data at least one of at least one foot contact time, a distance traveled, a pace, and a speed of the person.

45. The method of claim 44, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

20 (d) in response to the first messages, displaying on the wristwatch information based on the processed data received from the first device.

46. The method of claim 44, further comprising a step of:

(e) with the first device, receiving at least one second message from the second

25 device that comprises calibration information used to generate the processed data.

47. The method of claim 43, wherein the second device comprises a wristwatch, and wherein the method further comprises a step of:

(d) in response to the first messages, displaying on the wristwatch information

30 based on the processed data received from the first device.

48. The method of claim 43, further comprising a step of:

(e) with the first device, receiving at least one second message from the second device that comprises calibration information used to generate the processed data.

49.   A first device capable of engaging in two-way communication with at least a second device, comprising:

means for powering on a receiver included the first device to listen for second messages transmitted from the second device to first device during finite time periods following transmission of respective first messages from the first device to the second device; and

means for, after each of the finite time periods following the transmission of the respective first messages from the first device to the second device, powering off the receiver included in the first device.

50.   A second device capable of engaging in two-way communication with at least a first device, comprising:

means for when the second device needs to communicate with the first device, powering on a transmitter included in the second device to transmit second messages to the first device during finite time periods following reception by the second device of respective first messages from the first device; and

means for, after transmission of each of the second messages from the second device to the first device, powering off the transmitter included in the second device.